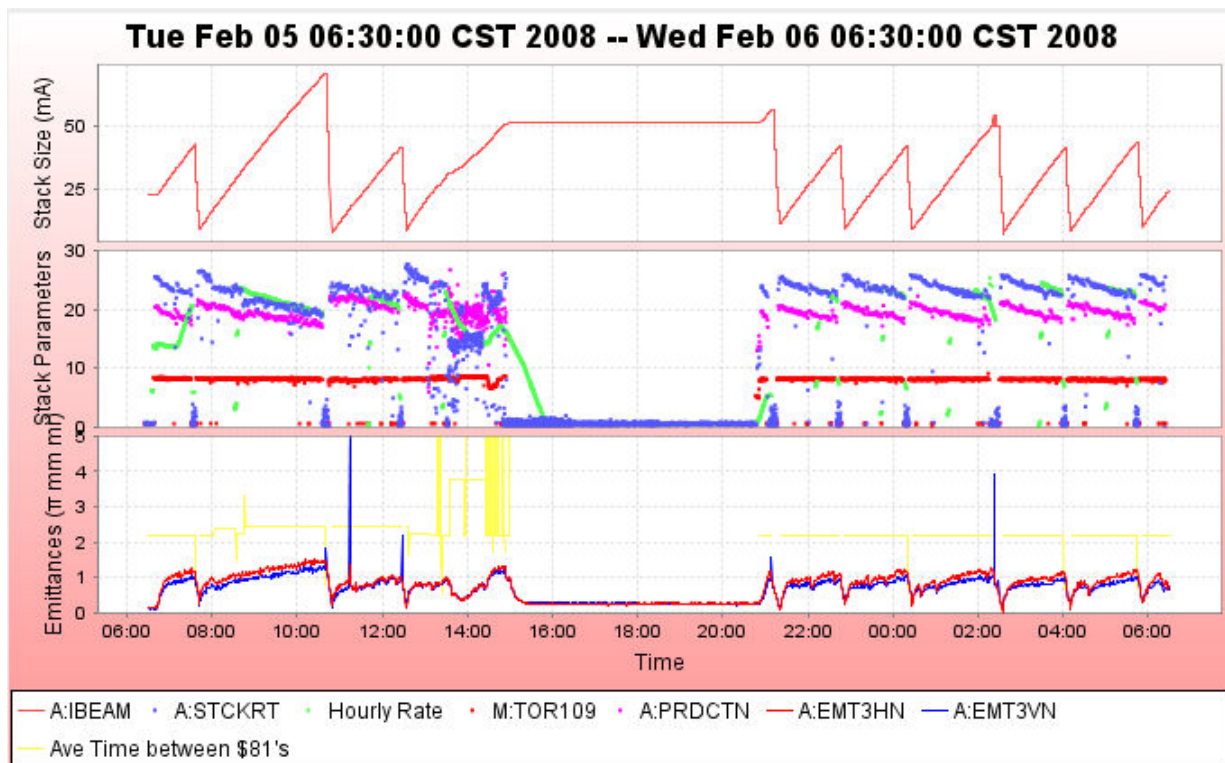


Stacking

- Protons on target
 - Ran 11 turns at around 7.4 to 7.5×10^{12} on target overnight.
 - When NuMI turned off before the MI access, the 11 turn stacking 29σ s gave us around 8×10^{12} .
- Our peak stacking hour was 23.81mA .
- Average Production 17.67 e-6/proton .
- Both stacking and production are down a bit, so we will look into this today.
- DRF1 is sitting at about 5.1 MV threshold. During our next tunnel access day, we will need to replace PA tubes on at least one station.
 - DRF1-4 continues to spark.
 - Around 2pm , experts turned down the station by 70KV and the station got more stable for a number of hours, but returned to tripping overnight.
 - We may take the station offline today to look at it. DRF1 fanback voltage will drop to $\sim 4.3\text{MV}$ during this time, so production may take a small hit during this time.
 - DRF1-3 & DRF1-7 are PA (tunnel) problems.
 - DRF1-7 is down by 172 KV , DRF1-3 is down by 83 KV .
- A trombone for the Accumulator core horizontal band 3 system (A:CH3T1) is not working. Expert will look into this today.
- After the MI access, there was 50 minute delay when the HV100 supply would not turn back on due to AC imbalance indication. Experts came in and gave the supply some attention, and the supply came back to life.



Transfers

- Unstacked 346.24 E10 in 29 transfers over 9 sets.
 - Accumulator to Recycler efficiency averaged 89.56%.
 - Efficiency is down in part due to a couple of low efficiency transfers yesterday that were associated with some Recycler ramp studies.
- The controls-generated Excel Spreadsheets for Recycler stopped updating yesterday afternoon.
- Suspect that the A:IBEAM1 failure to report on some shots is an MADC problem.
 - I watched a few transfers, ready to reset the MADC, but it appears to be working.

Studies

- Tuning Efforts
- 11:02:00 The target was moved

Requests

- P1 line optics changes during Recycler shots. This should be transparent.
- Debuncher Gain Ramping
 - Developing Java software to more efficiently change the gain ramps.
 - The expert is working on the code for the application today and hopes to have it working by the end of the day.
 - May want to take some time during the day shift to test the new software if it is ready. We will try to make this effort as transparent as possible.
 - This will be in advance of a more dedicated chunk of study time (2-4 hours) where we will need stable beam. We can do this on an evening shift, but if weather conditions are bad this afternoon, I will hold off on this request until tomorrow.
- Take DRF1-4 offline for a couple hours.
 - Experts will isolate the supply from the load and determine if the problem is upstairs or downstairs.

- upstairs or downstairs.
- If the problem is upstairs, we try to fix it if possible.

FESS Notes

- There is no ICW for AP0 and AP50.
 - This means no fire protection.
 - Experts think we might have another sink hole problem, like we had in the transport sump area a few months back.
- Pbar 95-deg LCW heat exchanger HE9's delta-p has risen from 4psi to 10-11psi. Once it reaches 12-14psi, experts will need to switch to the shell heat exchanger. This will happen as early as next week. We should coordinate this after a set of transfers to the Recycler.

Other Notes

- Paul's Numbers
 - Most in an hour: 23.81 mA at Wed Feb 06 03:34:50 CST 2008
 - Best: 25.19 mA on 30-Jan-08
 - Average Production 17.67 e-6/proton Best: 25.41 e-6/proton on 01/30/2008
 - Average Protons on Target 6.96 e12 Best: 8.77 e12 on 07/24/2007
 - Largest Stack .00 mA Best: 271.01 mA on 11/14/2007

- Al's Numbers

Stacking

Pbars stacked: 351.62 E10
Time stacking: 16.66 Hr
Average stacking rate: 21.11 E10/Hr

Uptime

Number of pulses while in stacking mode: 25979
Number of pulses with beam: 24752
Fraction of up pulses was: 95.28%

The uptime's effect on the stacking numbers

Corrected time stacking: 15.87 Hr
Possible average stacking rate: 22.15 E10/Hr

Recycler Transfers

Pbars sent to the Recycler: 346.24 E10
Number of transfers : 29
Number of transfer sets: 9
Average Number of transfer per set: 3.22
Time taken to shoot: 01.47 Hr
Time per set of transfers: 09.80 min
Transfer efficiency: 89.56%

Other Info

Average POT : 7.50 E12
Average production: 18.94 pbars/E6 protons